

REMARKS

Applicants respectfully request reconsideration and allowance of the above-identified patent application. Claims 94-111 and 128-137 remain pending, of which claims 94 and 128 are independent method claims. As indicated above, claims 94 and 128 have been amended by this communication.

Initially Applicants and Applicants' attorney express appreciation to the Examiner and the Examiner's supervisor for the courtesies extended during the recent interview held on April 20, 2006. The claim amendments and arguments submitted in this paper are consistent with the amendments and arguments presented during the course of the interview.¹

Applicants also note with appreciation the Examiner's withdrawal of the previous grounds of rejection. Further, Applicants express appreciation for the Examiner's consideration of the documents submitted in the Supplemental Information Disclosure Statement (IDS) filed September 7, 2005.

In the Office action, claims 94-99 and 137 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,278,466 to Chen ("*Chen*"). Moreover, claims 100-101 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Chen* in view of U.S. Patent No. 5,623,587 to Bulman ("*Bulman*"). In addition, claims 102-111 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Chen* in view of *Bulman* and further in view of U.S. Patent No. 6,175,663 to Huang ("*Huang*"). Finally, claims 128-136 and 138-139 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Chen* in view of U.S. Patent No. 6,445,874 to Catlow ("*Catlow*").² Applicants respectfully traverse these grounds of rejection.

As discussed during the interview, Applicants' invention generally relates to generating a compressed video stream representing a display for computer program(s) ran at a server that

¹ Applicants also note for the record (as discussed in the previous interview) that this case is part of a family of cases including the following application serial numbers: 09/770,769; 09/770,644; 09/770,767; 09/770,765; 09/770,766; 10/975,693; 10/976,063; 09/744,771; and 09/744,662. In order to preserve any and all rights available to Applicants, Applicants will not provide a terminal disclaimer with reference to any of the aforementioned cases at this time. Nevertheless, one or more terminal disclaimers may be provided in the future if the Examiner deems it necessary.

² Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

provides remote client access to them. As recited in independent claim 94, e.g., the claimed embodiment allows for modification of elements of the display for efficient compression by first generating display elements at a server that represent at least a portion of a display for a computer program running at the server, which is configured to receive remote interaction from a remote client. The computer program receives continuous user interaction via the remote client that changes one or more elements of the display for said executed computer program, wherein at least one of the display elements changed is an unmodified object. The unmodified object is then modified to produce a modified object, wherein the modification is performed independently of the executed computer program in such a way that the modified object will be more efficiently converted to a compressed video stream than the unmodified object. A compressed video stream is then generated by converting at least the modified object into the compressed video stream for rendering at least a portion of the display of the executed computer program at a display device on the client for allowing a user interaction with the at least one of the display elements.

The embodiment recited in claim 128 is directed toward a similar method for determining when to generate a compressed video stream representing a display for computer program(s) run at a server that provides remote client access to them. This embodiment allows for a computer program to be executed at a server, which generates display objects, from a set of display commands that are at least a portion of a display for the computer program. Changes of the display, which are responsive to at least one type of continuous user interaction command received from a remote client are identified and it is then determined whether the changes warrant an update to an image based at least in part on one or more of available bandwidth, available computing power, or type of user connection. Upon determining the changes do warrant an update, the changes are processed and the display commands are converted into a compressed video stream, wherein the changes are inserted into said compressed video stream at an update frame rate corresponding to a priority assigned to other portions of the display that are unchanged and such that changes to said image are inserted into the compressed video stream at a faster rate than compressed data that does not include changes to said image.

As discussed and generally agreed to during the interview, the cited art fails to make obvious the claimed invention. In particular, the cited alleged prior art does not disclose,

suggest, or enable each and every element of Applicants claimed invention.³ For example, the alleged prior art of *Chen*, *Bulman*, *Huang*, and *Catlow*—taken either individually or as a whole—does not disclose, suggest, or enable (among other things) generating display elements at a server, the display elements representing at least a portion of a display for a computer program running at the server, which is configured to receive remote interaction from a remote client, receiving, at the computer program, continuous user interaction via the remote client that changes one or more elements of the display for the executed computer program, wherein at least one of the display elements changed is an unmodified object, and modifying the unmodified object to produce a modified object, wherein the modification is performed independently of the executed computer program in such a way that the modified object will be more efficiently converted to a compressed video stream than the unmodified object, as recited, *inter alia*, in claim 94. Further, the combination of *Chen*, *Bulman*, *Huang*, and *Catlow*—taken either individually or as a whole—does not disclose, suggest, or enable (among other things) determining whether changes to a display of a computer program running on a sever warrant an update to an image responsive to a type of continuous user interaction command received from a remote client based at least in part on one or more of available bandwidth, available computing power, or type of user connection, as recited, *inter alia*, in claim 128.

In contrast to the present invention, *Chen* is generally directed towards creating animation from a video and remotely transferring such animation to a client upon demand (similar to a video-on-demand mechanism). Although *Chen* discloses modifying the animation into various formats based on remote client capabilities or user preferences, the animation is not

³ “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP § 2131. That is, “for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly.” MPEP § 706.02. Applicants also note that “[i]n determining that quantum of prior art disclosure which is necessary to declare an applicant’s invention ‘not novel’ or ‘anticipated’ within section 102, the stated test is whether a reference contains an ‘enabling disclosure.’” MPEP § 2121.01. In other words, a cited reference must be enabled with respect to each claim limitation.

In order to establish a *prima facie* case of obviousness, “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP § 2143 (emphasis added). In addition, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. MPEP § 2143. During examination, the pending claims are given their broadest reasonable interpretation, i.e., they are interpreted as broadly as their terms reasonably allow, consistent with the specification. MPEP §§ 2111 & 2111.01. Finally, Applicants note that M.P.E.P. §2141.02 states that the cited references must be considered as a whole, including those sections that “teach away” from the claimed invention. (Citation omitted).

a display of a computer program that is continuously changed based on user interaction. In fact, as discussed during the interview, once the animation is selected for display, the animation is automatically formatted and downloaded without any further interaction from the user. In other words, no continuous user interaction is received that otherwise changes the animation. As such, *Chen* cannot possibly disclose or suggest receiving, at the computer program, continuous user interaction via the remote client that changes one or more elements of the display for the executed computer program, wherein at least one of the display elements changed is an unmodified object, and modifying the unmodified object to produce a modified object, wherein the modification is performed independently of the executed computer program in such a way that the modified object will be more efficiently converted to a compressed video stream than the unmodified object, as recited, *inter alia*, in claim 94. Further, *Chen* is silent with regards to determining whether changes to a display of a computer program running on a sever warrant an update to an image responsive to a type of continuous user interaction command received from a remote client based at least in part on one or more of available bandwidth, available computing power, or type of user connection, as recited, *inter alia*, in claim 128. Recognizing some of the deficiencies of *Chen*, the Office action cites *Bulman*.

Bulman discloses methods and systems for superimposing and replacing portions of images, such as replacing the head of a human for the head of an animal. The Office action relies on *Bulman* as allegedly disclosing elements recited in various dependent claims. Accordingly, *Bulman* does not rectify those deficiencies noted above for independent claims 94 and 128 with regards to *Chen*. In fact, as previously mentioned in other communications, the complex process and data consumption described in *Bulman* for modifying images for superposition of portions thereof would indeed make it more difficult to convert images into compressed video. As such, Applicants respectfully submit that *Bulman* "teaches away" from Applicants' claimed invention for modifying objects of a computer program display in such a way to more efficiently convert them to compressed video streams, as recited in claim 94.

Similarly, *Bulman* is silent with regards to determining that changes in an image of a computer program display at a server warrant updates to a client based on available bandwidth, available computing power, or type of user connection, as recited, *inter alia*, in claim 128. Accordingly, *Bulman* cannot possibly rectify those deficiencies noted above with regards to

Chen for claims 94 and 128. Noting some of the deficiencies of both *Chen* and *Bulman* the Office action cites *Huang*.

Huang discloses a method and apparatus for preserving background continuity in images. Similar to *Bulman*, however, *Huang* is silent with regards to display objects or commands, which represent a display of an executed computer program, receiving continuous user interaction via a remote client that changes elements of the display for the executed computer program, and modifying or determining changes in such display objects for conversion into a compressed video stream.⁴ In fact, the Office action relies on *Huang* for features found in Applicants' dependent claims. As such, *Huang* cannot possibly rectify the deficiencies of *Chen* and *Bulman* noted above with regard to Applicants' independent claims 94 and 128. Indeed, the Examiner acknowledged during the interview that the amendments proposed appear to overcome current rejections, meaning that a new search most likely will be needed.

Noting some of the deficiencies of *Chen* regarding claim 128, the Office action cites *Catlow*. *Catlow* discloses a video processing system. Similar to *Chen*, however, *Catlow* does not disclose or suggest receiving, at the computer program, continuous user interaction via the remote client that changes one or more elements of the display for the executed computer program, wherein at least one of the display elements changed is an unmodified object, and modifying the unmodified object to produce a modified object, wherein the modification is performed independently of the executed computer program in such a way that the modified object will be more efficiently converted to a compressed video stream than the unmodified object, as recited, *inter alia*, in claim 94. Further, *Catlow* is silent with regards to determining whether changes to a display of a computer program running on a sever warrant an update to an image responsive to a type of continuous user interaction command received from a remote client based at least in part on one or more of available bandwidth, available computing power,

⁴ Similar to the footnote above, Applicants also note that the Office Action's motivation for combining the teachings of *Huang* with *Chen* and/or *Bulman* is insufficient to support a *prima facie* case of obviousness. For example, the Office Action alleges that "it would have been obvious...to take the apparatus disclosed by *Chen*, add the superposition system taught by *Bulman*, and add the text object taught by *Huang* in order to obtain an apparatus that operates more efficiently by being able to automatically search objects based on text." Applicants respectfully note, however, that neither *Chen* nor *Bulman* are directed toward searching objects. Accordingly, there cannot be any motivation in the cited references themselves, or in the knowledge generally available to those skilled in the art, to combine the reference teachings in the manner suggested by the Office Action. Therefore, Applicants reserve the right to challenge this lack of motivation in future communications as needed.

or type of user connection, as recited, *inter alia*, in claim 128. As such, *Catlow* does not rectify those deficiencies noted above with regards to any of the other cited references.

Because the cited references of *Chen*, *Bulman*, *Huang*, and *Catlow*—taken either individually or as a whole—do not disclose or suggest each and every element of Applicants' independent claims, Applicants respectfully submit that the combination of *Chen*, *Bulman*, *Huang*, and *Catlow* does not render Applicants' independent claims unpatentable. Accordingly, Applicants respectfully request withdrawal of these grounds of rejection.

Based on at least the foregoing reasons, Applicants respectfully submit that the cited prior art fails to anticipate or make obvious Applicants' invention, as claimed for example, in independent claims 94 and 128. Applicants note for the record that the remarks above render the remaining rejections of record for the independent and dependent claims moot, and thus addressing individual rejections or assertion with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable, and Applicants reserve the right to do so.

All objections and rejections having been addressed, Applicants respectfully submitted that the present application is in condition for allowance, and notice to this effect is earnestly solicited. Should any question arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at +1.801.533.9800.

Dated this 16th day of May, 2006.

Respectfully submitted,



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